

CLAIMS

1-17 (cancelled)

18. (new) A system for transferring a fluid between two structures movable relative to each other, comprising:

- a. a crane pedestal adapted for mounting on a first structure,
- b. an offloading arm in the form of a crane boom rotatable about the crane pedestal in the horizontal plane and further moveable in the vertical plane,
- c. a trolley attached to the crane boom, said trolley being movable along the length of the crane boom, said trolley comprising a connection member having a universal joint adapted for connection to a receiving terminal on a second structure,
- d. a fluid-conveying pipe extending from the first structure along the crane boom and connected to the trolley, said fluid-conveying pipe having an arrangement for compensating for the longitudinal movement of the trolley,
- e. wherein said compensating arrangement comprises a section of substantially rigid pipe arranged along the crane boom in a spiral, the axis of said spiral being arranged parallel to the longitudinal axis of the crane boom, the pipe being made of a material of sufficient rigidity that the pipe section will maintain its spiral shape and parallel relationship with the crane boom under the combined weight of the pipe itself and its fluid contents, but also having sufficient flexibility that the spiral section exhibits the capacity for compression and extension,
- f. and further wherein the longitudinal compensation is effected by the compression and extension of the spiral pipe section and not by the use of articulating or swivel joints in the spiral section.

19. A fluid transfer system according to claim 18, wherein the fluid comprises a liquid.
20. (new) A fluid transfer system according to claim 18, wherein at least one of the structures is a ship.
21. (new) A fluid transfer system according to claim 19, wherein the fluid is LNG.
22. (new) A fluid transfer system according to claim 18, further comprising a crane column attached to the crane pedestal by slewing mechanism that provides rotating of the crane column relative to the crane pedestal in vertical axis relative to the platform, and wherein the crane boom is rotatable connected at essentially one end to the crane column by a hinged arrangement and wherein a winch and wire assembly operate to raise and lower the crane boom.
23. (new) A fluid transfer system according to claim 18, wherein the connection member of the trolley comprises hinge joints connected to a cone, the cone adapted to mate with a landing skirt of a rotating table of the receiving terminal of the second structure.
24. (new) A fluid transfer system according to claim 18, wherein the connection member of the trolley comprises hinge joints connected to a pin, the pin adapted to mate with a landing skirt of a rotating table of the receiving terminal of the second structure.
25. (new) A fluid transfer system according to claim 18 wherein the length of the spiral section is predetermined to permit a the expected degree of longitudinal movement